

OIL AND HAZARDOUS SUBSTANCE SPILL PREVENTION AND RESPONSE PLAN

UNITED STATES ARMY FORT STEWART/HUNTER ARMY AIRFIELD, GEORGIA

This Oil and Hazardous Substance Spill Prevention and Response Plan is a single, operational source document designed to meet the combined regulatory requirements for an Environmental Protection Agency (EPA) Facility Response Plan (FRP), an EPA Spill Prevention Control and Countermeasures (SPCC) Plan, and a US Army Installation Spill Contingency Plan (ISCP). Further, this plan addresses the emergency planning, notification and response actions directed by the Resource Conservation and Recovery Act (RCRA); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); and the Emergency Planning and Community Right-to-Know Act (EPCRA) and is consistent with the National Contingency Plan (NCP) and the Area Contingency Plan (ACP).

1.0 RESPONSE PLANNING REQUIREMENTS

- 1.1 The National Contingency Plan** The Clean Water Act (CWA) and the Comprehensive Environmental Response, Compensation and Liabilities Act of 1980 (CERCLA), as amended, require that Federal agencies make plans for emergency response to spills of oil and hazardous substances for which they are responsible. To comply with these acts, the Environmental Protection Agency (EPA) has published Title 40, Code of Federal Regulations (CFR) Part 300, *The National Oil and Hazardous Substances Pollution Contingency Plan*, commonly referred to as the National Contingency Plan. The Final Rule for 40 CFR Part 300 was published with an effective date of October 17, 1994.
- 1.2 Facility Response Plan** In response to the Oil Pollution Act of 1990 (OPA 90), the EPA issued a Final Rule effective August 30, 1994 revising 40 CFR Part 112, *Oil Pollution Prevention; Non-Transportation-Related Onshore Facilities*, that governs the development of Facility Response Plans (FRP) for oil storage and transfer facilities.

Under the Final Rule, FRPs must be prepared and submitted to EPA's Regional Administrator for those non-transportation-related facilities that could reasonably be expected to cause substantial harm to the environment (should a spill occur). The FRP requirement in the EPA Final Rule applies to Fort Stewart/Hunter Army Airfield because its oil storage capacities are greater

than a million gallons and a discharge could cause substantial harm to fish and wildlife and sensitive environments.

This FRP is a site-specific response plan, includes all petroleum handling and storage facilities at both Fort Stewart and Hunter AAF, and fully complies with all applicable Federal requirements under OPA 90. Fort Stewart and Hunter Army Airfield boundaries are within approximately 8 miles of each other, and both military posts operate under the same commander, Qualified Individual, emergency response organization, and notification system. Specific information on individual sites, products stored, resources at risk, protection strategies, and reporting requirements is provided in detail throughout this plan and in appropriate annexes.

1.3 Spill Prevention Control and Countermeasures Plan The EPA's Oil Pollution Prevention regulation published in the Federal Register on December 11, 1973 addresses non-transportation related facilities and is further identified in 40 CFR Part 112 which requires facilities to have a fully prepared and implemented Spill Prevention Control and Countermeasures (SPCC) Plan. This Plan is designed to establish spill prevention procedures, methods, and equipment requirements for non-transportation-related facilities with aboveground (non-buried) oil storage capacity greater than 1,320 gallons (or greater than 660 gallons aboveground in a single tank) or buried underground oil storage capacity greater than 42,000 gallons. Those facilities meeting these criteria, because of their location, that could reasonably be expected to discharge oil into navigable waters of the United States or adjoining shorelines, require SPCC plans. Fort Stewart/Hunter Army Airfield, because of its location and its above- and underground oil storage capacities that exceed the regulatory thresholds, qualifies as a non-transportation-related facility and requires an SPCC plan.

1.4 Area Contingency Plan The Oil Pollution Act of 1990 and Executive Order 12777 require that Area Spill Contingency Plans be developed in accordance with the National Response Policy. The policy also requires that a predesignated Federal On-Scene Coordinator (FOSC) be assigned to ensure effective and immediate removal of a discharge of oil or hazardous substances. The United States Coast Guard (USCG) designates FOSCs for the coastal zone of the US, and the EPA designates FOSCs for the inland zone.

EPA Region IV has been predesignated to carry out the duties of the FOSC for the inland portions of the Standard Federal Region IV. Fort Stewart/Hunter Army Airfield operates within the guidelines of the EPA for facility response plans as well as for the Area Contingency Plan (ACP).

Response procedures during a fuel spill incident generally include the following phases: discovery and notification; preliminary assessment and initiation of action; containment, countermeasures, cleanup and disposal; and documentation and cost recovery. While these phases remain much the same for hazardous substance spills, greater emphasis is placed on hazard identification, vulnerability and risk in order to minimize the danger to public and response personnel, to avoid escalation of the incident and to stabilize the situation. The FOSC has the ultimate authority in a response operation and will exert this authority if spill response actions are not performed in a timely manner or in accordance with the ACP or the appropriate response plan.

This Oil and Hazardous Substance Spill Prevention and Response Plan is consistent with the National Contingency Plan (NCP) published in September 1994. Specific references can be found in Annex D, Spill Response Organization and Duties. The OHS Spill Prevention and Response Plan is also consistent with EPA Region IV Inland Area Contingency Plan, dated January, 1995.

- 1.5 US Army Installation Spill Contingency Plan** Army Regulation 200-1, *Environmental Protection and Enhancement*, dated 21 February 1997, requires all installations, within specific parameters, to maintain written procedures on spill response at potential spill sites, to prepare spill contingency procedures to respond to spills on Army installations or caused by Army actions and to identify Army resources for cleaning up spills outside Army property (for assistance to State or other Federal agencies).
- 1.6 Additional Emergency Response Planning Requirements** Facilities that handle or store hazardous substances, the release of which could endanger health and human safety and adversely impact the environment, must comply with additional Federal regulations that govern emergency planning, notification and response. These requirements are part of the RCRA, CERCLA, and EPCRA contained in 40 CFR Part 264, 40 CFR Part 302, and 40 CFR Part 355, respectively.

2.0 ADMINISTRATION AND POLICY

- 2.1 General** As a major operational installation during both peace and war, Fort Stewart/Hunter Army Airfield includes petroleum and hazardous substance handling and storage sites whose operations have the potential for spills of oil on land and water. Operational efficiency and safety of personnel and equipment, as well as Federal and Army regulations, require that a plan exist to effectively respond to oil and hazardous substance spills at the installation. This **Oil and Hazardous Substance (OHS) Spill Prevention and Response Plan** combines multiple Federal requirements and serves as the single

operational document for responding to oil and hazardous substance spills occurring at Fort Stewart/Hunter Army Airfield.

A detailed cross-reference of all pertinent regulatory response plan requirements is provided on the green pages at the front of the OHS Spill Prevention and Response Plan for use by the regulatory agencies.

- 2.2 Army Policy** Army policy is to comply with Federal and State regulations.
- 2.3 Effective Date** The Fort Stewart/Hunter Army Airfield OHS Spill Prevention and Response Plan is effective **July 1, 1998** and supersedes all previous Fort Stewart/Hunter Army Airfield spill response plans.
- 2.4 Plan Submission** Based upon requirements under the Oil Pollution Act of 1990 and resultant regulatory guidance, the OHS Spill Prevention and Response Plan is to be submitted to the EPA for approval.
- 2.5 Plan Update/Review and Resubmission** The OHS Spill Prevention and Response Plan must be reviewed at least annually by the Commanding General, Fort Stewart/Hunter Army Airfield or his designated representative (the Director of Public Works), to incorporate changes in the listings of economically important or environmentally sensitive areas, to address facility changes (design, construction, operation or maintenance that materially affects the potential for discharge into navigable waters), and to ensure compliance with any applicable changes to the National or Area Contingency Plans. The annual review is to be made within one month of the anniversary date of the approval of the original plan. If there are no changes to the OHS Spill Prevention and Response Plan, the Record of Changes page located behind **THE RED PLAN** should be so annotated. If there are changes, the resulting plan amendments must be noted on the Record of Changes page and provided to the EPA. Material SPCC Plan changes/amendments must be certified by a registered professional engineer in accordance with paragraph 112.3 (d) of 40 CFR 112.

The entire OHS Spill Prevention and Response Plan must be resubmitted to the EPA not later than five years from the approval date of the original plan.

- 2.6 Proponency** The responsible office for the OHS Spill Prevention and Response Plan is the :

Director of Public Works
1587 Frank Cochran Drive
Fort Stewart, Georgia 31314-4928

(912) 767-8356

2.7 Fort Stewart/Hunter Army Airfield Policy for Responding to Oil and Hazardous Substance Spills

- **Should an oil or hazardous substance spill occur, persons discovering the discharge should notify the Fort Stewart/Hunter Army Airfield Fire Department by calling the following number:**

911

- Supervisors and/or personnel responsible for petroleum or hazardous substance storage or handling at Fort Stewart/Hunter Army Airfield, who discover a spill, are required to take action **to stop the flow, contain the spill and cleanup the discharge**. If they are unable to safely and completely take these initial actions, they shall **notify the Fort Stewart/Hunter Army Airfield Fire Department immediately**.
- The fire department serves as the initial responder to all reported spills and notifies the Public Works Senior Environmental Engineer of the circumstances, who will then notify the Director of Public Works (DPW). Besides being the Incident Commander, the Senior Fire Officer (fire department) responding to a spill assumes duties as the acting Installation On-Scene Coordinator (**IOSC**), until such time as the DPW or another designated individual assumes these specific responsibilities.

Note: Incident command responsibilities differ from IOSC responsibilities. While working with the IOSC, the Senior Fire Officer will continue to act as Incident Commander until the immediate emergency is resolved or incident command is turned over to another qualified individual.

- **The Director of Public Works (DPW) serves as Fort Stewart/Hunter Army Airfield's designated Installation On-Scene Coordinator (IOSC), and has full authority to direct and coordinate all control and cleanup efforts at the scene of an oil or hazardous substance discharge. The DPW also serves as the Fort Stewart/Hunter Army Airfield "Qualified Individual," defined by EPA as an individual with authority, including contracting authority, to implement spill removal actions. (See paragraph 6.0 for further discussion of the IOSC and Qualified Individual.)**
- The DPW, upon arrival at the spill site, may assume the duties as **IOSC**, leave the Senior Fire Officer as the acting **IOSC**, or appoint others, as appropriate,

to assume **IOSC** duties. See Annex D, Spill Response Organization and Duties.

- The DPW has directed the Environmental/Natural Resources Division to make all required notifications to Federal, Army, State and local officials as a result of an oil or hazardous substance spill at Fort Stewart/Hunter Army Airfield. However, when the time sensitivity of an emergency requires immediate notification of these agencies, the Senior Fire Officer will initiate this notification process and ensure that the **IOSC** and the Environmental/Natural Resources Division is informed.
- Additional members of the Installation Response Team (IRT) are alerted by the **IOSC** as needed to respond to a spill. The IRT is the installation-wide structure utilized in responding to spills or threat of spills at Fort Stewart/Hunter Army Airfield. It includes personnel trained and equipped to control and cleanup spills, such as the fire department, as well as staff specialists with specialized skills, e.g., public affairs and preventive medicine. Other Fort Stewart/Hunter Army Airfield personnel and equipment are available from military units and post support organizations and may, under some circumstances, be safely used in some cleanup capacity with little or no additional training, protective equipment, etc.
- The IRT is directed by the **IOSC**, who is responsible for local planning, training and the execution of the Fort Stewart/Hunter Army Airfield OHS Spill Prevention and Response Plan.
- The IRT provides the installation-wide response to a spill at Fort Stewart/Hunter Army Airfield. Depending upon the size and effects of the spill, the **IOSC** can activate the entire IRT structure or selected portions. See Annex D, Spill Response Organization and Duties.
- If the spill incident is beyond the IRT capabilities, the **IOSC** initiates actions to obtain appropriate spill response contractor and other outside support for further augmentation to the IRT efforts.
- The Commander, Fort Stewart/Hunter Army Airfield, can direct the full support of **IOSC** requirements with augmentation personnel and equipment from military organizations assigned to the installation. If necessary, additional military specialists and equipment from other Department of Defense (DOD) installations can also be requested. The **IOSC** requests additional DOD assistance through the Fort Stewart/Hunter Army Airfield Chief of Staff.

Note: The term "Commander" will be used throughout this Plan to refer to the Commanding General, Fort Stewart/Hunter Army Airfield and the Garrison Commanders of Fort Stewart and Hunter Army Airfield, except where it is necessary to identify specific individuals.

3.0 PLAN ORGANIZATION

The Fort Stewart/Hunter Army Airfield Oil and Hazardous Substance Spill Prevention and Response Plan is organized into three basic sections:

- 3.1 Emergency Response Action Plan (THE RED PLAN)** This is an abbreviated, critical action plan that defines key procedures that must be taken in the early stages of a response to an oil or hazardous substance spill. This plan, which functions as a concise, separate, stand-alone document for spills of any kind, addresses essential and time-sensitive procedures that must be followed. **THE RED PLAN'S** primary purpose is to minimize confusion, simplify and guide initial response procedures, and ensure proper organization of the installation's response effort. In following **THE RED PLAN**, once appropriate notifications and response are underway, transition to the more detailed OHS Spill Prevention and Response Plan is directed. **THE RED PLAN** is printed on red paper and is the first section in the Fort Stewart/Hunter Army Airfield OHS Spill Prevention and Response Plan.
- 3.2 The Fort Stewart/Hunter Army Airfield Oil and Hazardous Substance Spill Prevention and Response Plan** This is the Fort Stewart/Hunter Army Airfield in-depth response plan that addresses all aspects of the response, organization, assessment, establishment of priorities, environmental considerations, recommended cleanup techniques, training, preventive maintenance, etc. The OHS Spill Prevention and Response Plan provides essential guidance in addressing wide-ranging response actions and specific State, Federal and Army planning requirements. After key actions in **THE RED PLAN** have been initiated, the Director of Public Works (DPW), serving as the Installation On-Scene Coordinator and Qualified Individual (QI), in coordination with the Installation Response Team and the primary spill response contractor, develops a coordinated strategy for the response and begins a thorough organization of the response, recovery and mitigation efforts, following the OHS Spill Prevention and Response Plan.
- 3.3 The Supporting Annexes** The supporting annexes at the gold tabs are for use with both of the above plans, and provide more detailed information, guidance and supporting data that is important to the overall management of spill response operations.

4.0 FACILITY NAME, GEOGRAPHICAL LOCATION, PHYSICAL DESCRIPTION, ACCESS ROUTES AND FUEL TRANSFER OPERATIONS

- 4.1 Mission and Organization** Fort Stewart/Hunter Army Airfield, Georgia is an active US Army military installation and is subordinate to the Army's Forces Command at Fort McPherson, Georgia. Fort Stewart/Hunter Army Airfield supports a variety of military organizations to include the US Army 3d Infantry Division (Mechanized) and special operations forces, Reserve and National Guard units, a USCG Air Station, and various Defense Agencies' offices.
- 4.2 Facility Location** Fort Stewart, the largest Army post east of the Mississippi River, covers an area of 279,270 acres, which includes parts of Liberty, Bryan, Evans, Long and Tattnall Counties. The military reservation is approximately 39 miles across from east to west and 19 miles north to south. The main cantonment area is located near Hinesville, Georgia, approximately 41 miles southwest of Savannah. Hunter Army Airfield is located on the south side of Savannah, consists of 5,400 acres and is entirely within Chatham County. Both Fort Stewart and Hunter Army Airfield are open military posts and are accessible 24 hours a day. There is ready access to Interstate 95, which passes between both posts, and to Interstate 16, a few miles to the north. When traveling south from Savannah on Interstate 95, Ft. Stewart may be reached by taking the Highway 144 exit west from Richmond Hill or by following Highways 17 and 196 to Hinesville and entering through the main gate. The Public Works Office is located at the junction of Bultman Avenue and Utility Street (through the main gate, left onto Bultman Avenue to the Directorate of Public Works). Ft. Stewart is also accessible by Highway 119 south from Pembroke and by Highway 144 east from Glennville. Hunter Army Airfield may be entered from Savannah through the Montgomery Street Gate or by following the Highway 204 exit from Interstate 95 and entering through the Wilson Boulevard Gate . (See Figure 1)
- 4.3 Aboveground Storage Facilities** Fort Stewart/Hunter AAF has five major bulk aboveground storage sites, i.e., the Evans Field Bulk Storage Facility, the Wright Army Airfield Bulk Storage Facility, the Fort Stewart Central Energy Plant, the Hunter Army Airfield Tank Farm and the Hunter Army Airfield Used Oil Storage Facility.
- 4.4 Underground Storage Facilities** Fort Stewart/Hunter Army Airfield also has four major underground petroleum bulk storage sites. The Hunter Army Airfield flightline pumphouses provide fuel to military aviation operating from that facility and three Army and Air Force Exchange Service (AAFES) Service Stations (Fort Stewart Main Post and Bryan Village, and Hunter AAF) provide

retail sales to owners of privately-owned vehicles authorized AAFES privileges.

- 4.5 Other Storage Locations** In addition to the bulk storage sites described, Fort Stewart/Hunter Army Airfield has 59 aboveground and 10 underground storage tanks located throughout the installation that provide mobility fuels, standby heating fuel and used oil collection for US Army agencies and offices. These tanks range in size from 275 gallons to 30,000 gallons and are described in Annex A. Additionally, US Army units stationed at and passing through Fort Stewart/Hunter Army Airfield are equipped with tank trucks and truck and trailer-mounted tank and pump units ranging in size from 600 gallons to 10,000 gallons. Further, small quantities of petroleum products and hazardous substances associated with routine operations are also to be found in various maintenance and repair activities, storerooms and buildings at Fort Stewart/Hunter Army Airfield.

5.0 FACILITY OWNER/OPERATORS FORT STEWART/HUNTER ARMY AIRFIELD

5.1 Facility Owner

Commanding General, 3d Infantry Division (Mechanized) and Fort
Stewart/Hunter Army Airfield
Attn: Director of Public Works (AFZP-DE)
1587 Frank Cochran Drive
Fort Stewart, Georgia 31314-4928
(912) 767-8356/FAX (912) 767-7876

5.2 Facility Operators

Environmental Management

Director of Public Works (Environmental Branch)
1557 Frank Cochran Drive
Fort Stewart, Georgia 31314
(912) 767-2010/FAX (912) 767-9779

Evans Field Bulk Storage Facility

Director of Logistics (Evans Field Bulk Storage Facility)
141 East 9th Street, Suite 100
Fort Stewart, Georgia 31314
(912) 767-3659/FAX (912) 767-5440

Wright Army Airfield Bulk Storage Facility

Commander, DISCOM

2219 Gulick Avenue
Fort Stewart, Georgia 31314
(912) 767-1725/FAX (912) 767-1156

Central Energy Plant

Director of Public Works (Central Energy Plant)
1145 McFarland Avenue
Fort Stewart, Georgia 31314
(912) 767-8931

Hunter Army Airfield Tank Farm

Commander, 260th Quartermaster Battalion
197 South Lightning Road
Hunter Army Airfield, Georgia 31409
(912) 352-6796

Hunter Army Airfield Used Oil Tanks

Director of Public Works
98 South Middleground Road
Hunter Army Airfield, Georgia 31314
(912) 352-5535/FAX (912) 352-5713

Hunter Army Airfield Flightline Pumphouses

Commander, 260th Quartermaster Battalion
197 South Lightning Road
Hunter Army Airfield, Georgia 31409
(912) 352-6796

AAFES Service Stations

Army and Air Force Exchange Service
112 Viseck Road (Main Post) (912) 876-8434
876 Austin Road (Bryan Village) (912) 767-4103
Fort Stewart, Georgia 31314
931 Duncan Street (912) 352-5294
Hunter Army Airfield, Georgia 31409

6.0 AUTHORITIES

- 6.1 The "Qualified Individual"** Federal pollution prevention and response plan regulations requires that a "Qualified Individual" and at least one alternate "Qualified Individual" be designated in all petroleum-handling facility response plans. Further, these regulations require that the "Qualified Individual" and alternates must:

- Speak fluent English, be available on a 24-hour basis, and be able to arrive at the facility within a reasonable time;
- Be familiar with the implementation of the facility response plan;
- Be trained in their responsibilities in the response plan; and
- Have written authority to activate and engage in contracting with oil spill removal organizations, act as liaison with the designated Federal On-Scene Coordinator, and obligate funds required to carry out response activities.

In compliance with EPA regulations, the DPW is designated as the "Qualified Individual" and has full authority, including contracting authority, to implement spill removal operations and ensure compliance with all applicable waste disposal requirements.

Director of Public Works
1587 Frank Cochran Drive
Fort Stewart, Georgia 31314-4928
(912) 767-8356; FAX (912) 767-7876

- 6.2 The "Alternate Qualified Individual"** In the absence of the Director of Public Works, the Deputy Director of Public Works serves as the Alternate Qualified Individual. The Deputy Director has full authority, including contracting authority, to implement spill removal operations and ensure compliance with all applicable waste disposal requirements.

Deputy Director of Public Works
1587 Frank Cochran Drive
Fort Stewart, Georgia 31314-4928
(912) 767-8356; FAX (912) 767-7876

- 6.3 The Installation On-Scene Coordinator** The Director of Public Works (DPW), representing the Commanding General at Fort Stewart/Hunter Army Airfield, serves as the principal operational point of contact for installation queries concerning environmental matters pertaining to petroleum and hazardous materials storage and spill prevention and response. During spill events, the DPW heads the Installation Response Team and serves as the designated Installation On-Scene Coordinator. Army regulations define the Installation On-Scene Coordinator as that official whose responsibility it is to coordinate and direct Army control and cleanup efforts at the scene of an oil or hazardous substance spill due to Army activities. The Deputy Director of Public Works serves as the Alternate Installation On-Scene Coordinator.

- 6.4 The Acting Installation On-Scene Coordinator** The Director of Public Works has appointed the Senior Environmental Engineer as the Acting Installation On-Scene Coordinator with day-to-day responsibility for coordinating spill

prevention and response actions. The Senior Environmental Engineer has the full authority to implement this response plan, to mobilize needed resources, coordinate with the Federal On-Scene Coordinator, and to obligate funds, if necessary. Additionally, as the first responder to a oil or hazardous substance spill, the Senior Fire Officer (fire department) serves as the interim Acting Installation On-Scene Coordinator (**IOSC**), alerts needed member of the Installation Response Team, and takes other required actions until relieved by the DPW or the Senior Environmental Engineer. The DPW has directed that mandatory notifications to Federal, State and local authorities be made by the Environmental/Natural Resources Division of the Directorate of Public Works. However, when the time sensitivity of an emergency requires immediate notification of these agencies, the Senior Fire Officer will initiate this notification process and ensure that the **IOSC** and the Environmental/Natural Resources Division are informed.

- 6.5 Emergency Coordinator/Emergency Response Coordinator** The emergency coordinator's duties under RCRA and emergency response coordinator's duties under EPCRA for reporting, planning and responding to hazardous waste and hazardous substance releases are the responsibility of the Director of Public Works. The Deputy Director of Public Works serves as the Alternate Emergency Coordinator and Alternate Emergency Response Coordinator.

7.0 PETROLEUM AND HAZARDOUS SUBSTANCES STORED AT FORT STEWART/HUNTER ARMY AIRFIELD

- 7.1 Petroleum Storage** The following petroleum products are stored in bulk at Fort Stewart/Hunter Army Airfield:
- JP-8
 - Diesel Fuel
 - Gasoline (unleaded regular, mid and premium grades)
- 7.2 Hazardous Substance Storage** An inventory of hazardous substances stored at Fort Stewart/Hunter Army Airfield is maintained by the Public Works Environmental/Natural Resources Division and the installation Safety Office. This inventory is updated annually and is used to provide information to the Fort Stewart/Hunter Army Airfield Fire Department, the Georgia Emergency Response Commission and the Local Emergency Planning Committees for areas that could be affected by a release. Site-specific spill response plans have been developed for specific storage locations and are maintained by the Fort Stewart/Hunter Army Airfield Safety Office.

***Oil and Hazardous Substance Spill Prevention and Response Plan
US Army, Fort Stewart and Hunter Army Airfield, Georgia***

Extremely hazardous substances (EHS) stored at Fort Stewart/Hunter Army Airfield that exceed the specified Threshold Planning Quantity (TPQ) have been reported to State and local authorities in accordance with 40 CFR 303. Currently, the following EHS are stored on the installation in the quantities and the locations indicated:

EHS*	Quantity (lbs)	Location
Chlorine	10,000	Hinesville/Fort Stewart Waste-water Treatment Facility
	3,000	Central Energy Plant, Ft. Stewart
EHS*	Quantity (lbs)	Location
	300	Bldg 456, FS Well #2
	300	Bldg 933, FS Well #1
	300	Bldg 1345, FS Well #3
	300	Bldg 4524, FS Well #5
	300	Bldg 7731, FS Well #6A
	300	Bldg 7732, FS Well #6B
	300	Bldg 8331, FS Well #12A
	300	Bldg 8338, FS Well #12B
	300	Bldg 9961, FS Well #4
	300	Bldg 15003, FS Well #8
	300	Bldg 16009, FS Well #7
	300	Bldg 18552, FS Well #13
	300	Bldg 19107, FS Well #10
	300	Bldg 439, Newman Pool
	300	Bldg 445, Corkan Pool
	300	Bldg 7098, Bryan Village Pool
	300	Bldg 7745, Weaver Pool
	300	Bldg 711, HAAF Well
	300	Bldg 8632, HAAF Well
	300	Bldg 8703, HAAF Well
	300	Bldg 8560, HAAF Well
	300	Bldg 339, HAAF Pool
	300	Bldg 8455, HAAF Well
	300	Bldg 8665, HAAF Well
	300	Bldg 712, HAAF Sewage Plant
	300	Bldg 6018, HAAF Pool
	300	Bldg 1205, HAAF Well
EHS*	Quantity (lbs)	Location
Sulfuric Acid	22,961	Bldg 1720, Ft. Stewart
	9,126	Bldg 1170, Ft. Stewart
	4,400	Central Energy Plant, Ft. Stewart

* TPQ for chlorine is 100 lbs and sulfuric acid 1,000 lbs. Only locations exceeding TPQ are shown.

- 7.3 Material Safety Data Sheets** Material Safety Data Sheet (MSDS) information for petroleum products and for those extremely hazardous substances that exceed the Threshold Planning Quantity (TPQ) listed in Appendix A of 40 CFR Part 355 that are stored, transferred or handled at Fort Stewart/Hunter Army Airfield, is located at Annex J.

8.0 MAXIMUM PETROLEUM STORAGE AND HANDLING CAPACITIES

- 8.1 Aboveground Storage** The maximum aboveground petroleum storage capacity at Fort Stewart/Hunter Army Airfield is 7,359,600 gallons.
- 8.2 Underground Storage** The maximum underground petroleum storage capacity at Fort Stewart/Hunter Army Airfield is 1,673,350 gallons.
- 8.3 Total Storage Capacity** The total petroleum storage capacity at Fort Stewart/Hunter Army Airfield is 9,032,950 gallons. A breakout of all tanks to include the capacity and other characteristics can be found in Annex E, Tab 1. See Annex A for more detailed information about the major Fort Stewart/Hunter Army Airfield fuel handling and storage facilities.

9.0 SPILL PREVENTION

- An outline of the Fort Stewart/Hunter Army Airfield spill prevention perspective can be found in Annex E, Tab 1 (Tank Hazard Identification). Included at this tab are data on all ASTs and USTs, detailing the type of product stored, tank construction information and year installed, location, and current status in terms of selected spill prevention characteristics.
- Spill prevention also requires a set of operational and inspection procedures which are systematically followed, conducted on a periodic basis, and can be incorporated into the various activities of the installation. At Annex M (Facility/Equipment Inspection and Records) are the Standard Operating Procedures (SOPs) Fort Stewart/Hunter Army Airfield uses to insure that proper measures are taken to sustain an effective spill prevention program. These SOPs include general loading/unloading procedures, tank procedures, and AST and UST leak detection and inspection procedures.
- As a means of insuring that the latest spill prevention techniques are used and practiced, training requirements from the various regulatory agencies and the US

Army are highlighted at Annex L (Training, Drills, Exercises and Records). These include a summation of Fort Stewart/Hunter Army Airfield's annual training requirements, and the drill and exercise program at various levels of the Installation Response Team organization.

10.0 DISCOVERY, NOTIFICATION, AND RESPONSE COUNTERMEASURES

This section deals with discovery, notification, and response countermeasures procedures that occur when a responsible Fort Stewart/Hunter Army Airfield employee becomes aware of an oil or hazardous substance discharge or the threat of a discharge.

- 10.1 Discovery** Spills during operational hours will likely be discovered quickly because of the number of military and civilian workers in the area. If the spill occurs during training, fuel servicing or maintenance operations, these activities will be shut down immediately to stop the flow and isolate the spill. If necessary, personnel can activate any available fire extinguisher systems, but the source of the spill should be secured as soon as possible without endangering the health and safety of personnel involved.

Spills during non-duty hours will probably be detected by a Military Police patrol or a passerby. In this instance, the individual discovering the spill should immediately notify the fire department. No attempt should be made by the discovering individual to try and stop the flow, unless the source is obvious and that person is familiar with the facility and/or equipment.

10.2 Notification

- 10.2.1 Fire Department** When a spill or the threat of a spill occurs, the Fort Stewart/Hunter Army Airfield Fire Department will be notified immediately.

Fort Stewart/Hunter Army Airfield Fire Department

911

The Senior Fire Officer responding to a spill will immediately assume the duties as interim Acting IOSC and will relinquish these duties only when relieved by the DPW or the Senior Environmental Engineer.

- 10.2.2 Directorate Of Public Works** The Fire Department will immediately notify the Public Works Senior Environmental Engineer, who will report the circumstances of the spill to the DPW.

Director of Public Works (Senior Environmental Engineer)
1557 Frank Cochran Drive
Fort Stewart, Georgia 31314
(912) 767-1078/Pager (912) 884-0555/FAX (912) 767-9779

10.2.3 Federal, Army, State and Local Notification Requirements The EPA regards any oil spill into navigable waters that causes a film or sheen upon or discoloration of the surface of the water or adjoining shorelines as a discharge of harmful quantities. The USCG requires persons in charge of an onshore facility to immediately notify the National Response Center (NRC) (1-800-424-8802) as soon as they have knowledge of a discharge of oil or a hazardous substance. All oil spills into surface water or wetlands shall be reported to the NRC. All surface oil spills that are 25 gallons or greater must also be reported to the NRC. The State of Georgia requires that all oil spills that meet or exceed Federal reporting standards be reported to the Department of Natural Resources, Environmental Protection Division through the State's Emergency Response Center at telephone number (404) 656-4863, during normal duty hours, or (800) 241-4133, after duty hours. With regard to hazardous or extremely hazardous substances, EPA regulations specify when a release must be reported based on quantity discharged. Any spills reported to Federal and State authorities will be reported through Army command channels. All mandatory notifications are addressed in **THE RED PLAN** and in Annex B. There are criminal and civil penalties for not notifying the appropriate agency of the Federal government immediately when a discharge occurs. **All spills at Fort Stewart/Hunter Army Airfield must be reported to the Environmental/Natural Resources Division (ENRD) and that office will determine if notification to Federal, Army and State authorities is necessary or advisable.** When appropriate, the ENRD will make all such notifications to the NRC, Army, and State/local officials.

In compliance with Federal regulations and in order to facilitate coordination with local authorities in an emergency, Directorate of Public Works personnel coordinate with the Liberty and Chatham County, Georgia Local Emergency Planning Committees (LEPCs) on a regular basis.

Refer to Annex A (Facility Information and Site Diagrams) for critical facility sites, transfer site locations, and **THE RED PLAN** or Annex B (Notification Checklist) for contact information.

10.3 Specific Spill Response Countermeasures As a minimum, the following specific spill response countermeasures shall be taken at Fort Stewart/Hunter Army Airfield by the Installation Response Team in the event of a spill. A

more detailed outline of specific responsibilities is provided at Annex D, Spill Response Organization and Duties.

- 10.3.1 Responsible Unit** This is the organization responsible for the equipment which caused the spill, or for the area or operation where the spill occurred. When a spill is observed, personnel in the responsible unit should immediately report it to the nearest supervisor. The responsible unit notifies the fire department and attempts to control and contain the spread of the spilled material, if this can be done without risk to life or health. As a general guideline, the responsible unit provides cleanup for spills up to 5 gallons. If possible, they should attempt to remain on location to guide the Installation Response Team, fire department or work crews to the spill area.
- 10.3.2 Fort Stewart/Hunter Army Airfield Fire Department** The fire department is the initial responder to spills that present a fire hazard, reach a waterway, or any spill in which the responsible unit does not feel capable of containing in a safe manner. The fire department will attempt to contain and control a spill and ensure it does not enter waterways, sewer lines or stormwater drainage. The Fire Chief/Senior Fire Officer (SFO) will notify the DPW when additional assistance is needed. As the interim **Acting Installation On-Scene Coordinator**, the Fire Chief/SFO will provide emergency assistance to injured or exposed personnel, take actions to minimize the chance of fire or explosion, and make the official estimate on the quantity of the spill.
- 10.3.3 Director of Public Works** After being alerted to a spill, the DPW assumes the duties of **Installation On-Scene Coordinator**. The DPW also becomes the "**Qualified Individual**" capable of making key decisions concerning the spill, initiating and executing the OHS Spill Prevention and Response Plan, and committing resources to address the emergency situation.

The initial response effort is directed by the **IOSC** and is composed of trained and capable assets on-hand at Fort Stewart/Hunter Army Airfield. These assets include, but are not limited to, facility fuel handling personnel, installation work site employees who handle various quantities of fuel, and Directorate of Public Works organizations such as the fire department, Road and Grounds crews and the Environmental/Natural Resources Division. Generally, the responsible unit will cleanup spills up to 5 gallons while the Public Works' Road and Grounds crews will handle spills up to 25 gallons. For larger spills, the DPW, or his designee the Senior Environmental Engineer, will determine if outside assets, i.e., spill response contractors, are needed. Every effort is made to confine the spill on land; to prevent it from entering waterways or stormwater and sewer drains; and keep it from spreading beyond the installation. The Commander is alerted by the **IOSC**,

as required, of the spill discovery and advised on any available information on the magnitude of the spill, the type product spilled, whether the spill threatens any waterway or sensitive environment areas, and whether additional assistance will be required. From this information, the requirements for boom and water recovery devices, pumps, hoses, skimmers, vacuum recovery equipment, etc., are determined and associated trained Fort Stewart/Hunter Army Airfield employees and outside resources are alerted for movement to the spill site or other critical areas.

For the local city responders (e.g., Savannah fire and police departments, the emergency medical service), the **IOSC**, or the Fort Stewart/Hunter Army Airfield Fire Chief (if so designated), becomes the focal point on the nature of the emergency, what the conditions are at the facility, the type and amount of spilled product, the cause of the spill, what cleanup services are enroute, and what the cleanup priorities will be.

Site-specific cleanup priorities are then determined from assessing the conditions at the spill site and referring to the pre-established priorities listed in Paragraph 13.0 (Protection and Cleanup Priorities, Methods and Techniques) of the OHS Spill Prevention and Response Plan. The **IOSC** develops a cleanup plan tailored to the requirements at the spill site and allocates cleanup assets to these tasks and priorities.

While immediate emergency actions are being taken, the Environmental/Natural Resources Division will gather information required to complete the "Initial Incident Oil Spill Report" form (located in **THE RED PLAN** and Tab 1, Annex B, Notification Checklist), and begin making and recording all applicable mandatory notifications.

10.3.4 Public Affairs Officer The liaison between Fort Stewart/Hunter Army Airfield, other Federal activities, and the media is conducted by the Public Affairs Officer (PAO) at Fort Stewart/Hunter Army Airfield. The PAO coordinates statements about the oil spill incident to interested personnel outside of Fort Stewart/Hunter Army Airfield. Refer to Annex K, Public Affairs, for further details.

10.3.5 Director for Plans, Training, and Mobilization The Director for Plans, Training, and Mobilization (DPTM) establishes, maintains and directs the Fort Stewart/Hunter Army Airfield Installation Disaster Plan. The DPTM operates the Fort Stewart and Hunter AAF Emergency Operations Centers; tasks military units at Fort Stewart/Hunter Army Airfield for troop support and equipment; and coordinates disaster control, evacuations, emergency shelters, command and control and mass feeding operations. Additionally,

the DPTM is responsible for establishing a field emergency operations center, i.e., forward command post, should one be required. If necessary, the DPTM, in consultation with the DPW, will direct execution of the Installation Disaster Plan.

10.3.6 Director, Safety Office The Safety Office will respond to spills/cleanup operations and assist the Installation Response Team by ensuring the cleanup operation is safely performed. The Safety Office will assist Commanders/Directors appointed to investigate the cause(s) of such spills and discharges.

10.3.7 Staff Duty Officer (SDO) The SDO is responsible for notifying and updating the Commander of an oil or hazardous substance spill, as required. If a spill occurs after duty hours and the fire department or DPW requests IRT personnel be recalled and mandatory reports made to Federal, Army, State and local authorities, the SDO may make these notifications.

10.3.8 Commander, Fort Stewart/Hunter Army Airfield As noted in paragraph 6.2, the Commander, Fort Stewart/Hunter Army Airfield has designated the DPW as the **IOSC** and to serve as the principal point of contact for Fort Stewart/Hunter Army Airfield spill response actions. The **IOSC** responds to the scene upon notification of the spill. As an authorized QI, the DPW may take charge of the scene or provide command support to a designated QI on the scene. The **IOSC** is responsible for notifying the Commander when the spill constitutes a threat to human health or welfare, endangers critical water areas, receives major coverage in the public media, or becomes the focus for an enforcement action. The DPW will submit situation reports to the Commander and the EPA (and other interested Federal agencies) and the State of Georgia, as applicable and provide personnel, materials, training, and equipment as required.

10.3.9 Installation Response Team (IRT) In addition to the key personnel listed above, other members of the installation staff, who can provide management oversight of specific areas, may be included in the IRT to ensure full support to the spill operation, e.g., Chief, Preventive Medicine; Provost Marshal; and the Staff Judge Advocate. Annex D, Spill Response Organization and Duties, graphically illustrates the organization of the IRT.

Once the magnitude of the cleanup requirement is more visible, additional resources and cleanup capability may be required. The **IOSC** has the option of continuing with an expansion of the primary spill response support from Fort Stewart/Hunter Army Airfield assets, or obtaining additional spill

response resources from other military commands or from commercial Oil Spill Removal Organizations (OSRO).

10.4 Response Countermeasures at Potential Spill Sites

10.4.1 Bulk Storage Facilities During operating hours, military personnel or civilian employees or supervisors at bulk storage facilities would normally observe a discharge during fuel transfer operations, when the potential for a spill is more likely. This could occur from a ruptured hose, pipe or valve, or from a tank discharge inside secondary containment. If a spill occurs during fuel transfer, operations are immediately stopped and all pumps and valves secured. (this is done even when the spill is unrelated to the ongoing operations). To ensure this can happen quickly, during the off-loading/loading of military tankers, trailers and aircraft, two persons normally are involved in the fuel transfer. One person is positioned to stop the flow if a problem develops, i.e., is operating a "deadman" switch or is standing by an electrical on-off switch. The other is positioned to monitor the flow of fuel, gauge fuel/remaining free space in a tank, etc. These persons are required to be visible to each other or, if not, to be able to communicate by some other means, e.g., intrinsically safe hand-held transceiver. Further actions are taken by these and other available fuel operators to contain the spilled fuel in the smallest area possible. Spill response materials, such as absorbent pads, and spill kits are stored in close proximity to all fuel handling sites and on fuel transporting vehicles. Efforts are directed towards ensuring that spills do not enter waterways or sewer systems nor flow towards potential ignition sources.

A discharge could also occur at other times and be detected during daily routine inspections at the facilities. Facility supervisors or their designated representatives are required each workday, to visually inspect all aspects of their facilities, walk the transfer lines, inspect spill containment, and examine the tanks, valves, pumps and equipment to insure that there are no leaks in the system. Normally, a daily entry in the facility log of the results of this inspection is made. During one of these inspections, a discharge that had occurred would likely be detected. Should a spill or a threat of a spill occur, the supervisor or senior representative present would take actions to limit the flow and report the spill immediately.

Military police routinely patrol fuel storage facilities and are able to report any spills or suspicious activities to facility managers through the MP desk sergeant and the Command's staff duty officer. Warning signs with a listing of telephone numbers to call are posted around storage sites, should a passer-by discover a spill during non-duty hours.

10.4.2 AAFES Service Stations The Fort Stewart AAFES Service Stations are located at 112 Viseck Road (Main Post) and 876 Austin Road (Bryan Village) and the Hunter Army Airfield Station is located 931 Duncan Street. These facilities provide routine fueling and basic automotive maintenance services to civilian and military personnel authorized military exchange privileges. During normal operating hours, supervisory, maintenance and sales personnel are present throughout the facility and would quickly detect any surface discharge should it occur. Such a discharge could happen during bulk resupply operations, automotive fueling (all pumps are self-service) or maintenance operations. During vendor resupply operations, tank truck operators are required to remain with the trucks during the fuel transfer and would stop refueling should a spill occur. Access to the fill pipe for each tank is within a loading pit that is able to contain small spills. These pits are closed and the covers locked except during resupply operations. Regarding automotive fueling operations, emergency shutoff switches are located throughout the service area and inside the retail stores should a problem develop at a pump or with a vehicle being fueled. Additionally, at the Fort Stewart Main Post and Hunter Army Airfield stations, leak detectors that have been installed on the fuel lines from the USTs to the pumps automatically shut down all pumps if a leak is detected on a line. Should a spill occur in the sales or maintenance area, it would likely be small, detected immediately and contained and cleaned up using available absorbent materials.

10.4.3 Spills in Other Areas Routine, day-to-day operations may present risks of discharging oil or releasing hazardous substances. In addition to the major fuel storage areas, spills might also occur at other locations such as the hazardous waste storage building, or during routine maintenance and repair or replacement operations, etc. Of particular concern are spills that are at or near facilities with large numbers of employees or visitors, e.g., Winn Army Community Hospital or a post swimming pool. The methods of responding to these spills would be generally similar to those discussed above. There are numerous minor storage tanks, tank trucks, fuel trailers and work areas throughout Fort Stewart/Hunter Army Airfield that store or handle oil and limited quantities of hazardous substances. Temporary spill containment systems, catch basins and other similar means of containment can be used to minimize the potential impact of spills, and spill response kits containing absorbent materials, boom, pad, etc., are readily available at these sites or can be transported there quickly.

10.5 Prioritized Response Procedures in the Event of a Spill The following prioritized procedures are generally applicable to all spills originating from

hose failures, piping ruptures, piping leaks, pump malfunctions, tank overflow situations, a tank failure or an explosion or fire:

- Alert on-site personnel by voice, hand-held transceiver, intercom, or direct telephone.
- Shut down all pumps and on-going transfer operations in coordination with other facility transfer personnel. Caution must be exercised when a flammable atmosphere might be present.
- Isolate the rupture (or leak) by closing valves on either side of a break.
- Activate the fire system, if appropriate and available.
- Notify the fire department.
- Evacuate non-essential personnel to safe areas.
- Eliminate sources of ignition; shut down all "hot work" If the spill involves a large amount of fuel, throw all master power switches to the off position.
- Continuously check for safety hazards.
- Monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment.
- Pass control at the spill site to the fire department's Senior Fire Officer.
- The Senior Fire Officer confirms initial containment priorities and actions and notifies the Public Works Senior Environmental Engineer of the spill.
- The Senior Environmental Engineer Assesses the spill and either assumes Acting **IOSC** duties or notifies the DPW who does so.
- The **IOSC**, upon arrival at the spill site, coordinates with the Senior Fire Officer (SFO) from the fire department; evacuation plans, if required, are agreed upon and executed.
- The SFO establishes on-site safety zones (hot, warm and cold), as required.
- The **IOSC** alerts the Installation Response Team (IRT).
- The **IOSC** directs emergency repairs, as necessary.
- The SFO monitors use of personnel protective equipment.
- Non-essential vehicles are evacuated from the spill site.
- Military Police establish control points.
- Containment operations are initiated with designated personnel.
- The **IOSC** makes remaining external notifications (spill response contractors are alerted for deployment) and executes responsibilities in accordance with **THE RED PLAN**.
- The **IOSC**, working with the IRT, monitors and oversees all on-scene response operations.
- The **IOSC** supports the Federal On-Scene Coordinator, if one is appointed.

- The **IOSC**, through the Environmental/Natural Resources Division, provides required situation reports to the EPA, Army headquarters, and State and local authorities.
- The fire department establishes and operates a shower point and decontamination station for workers who have contacted liquid fuel.
- Responders recover and remove contaminated soil to a disposal site. They recover pooled fuel through use of vacuum trucks or pumps and initiate boom deployment, as necessary.
- The **IOSC** completes spill response responsibilities outlined in **THE RED PLAN** and transitions to the broader and more detailed Fort Stewart/Hunter Army Airfield OHS Spill Prevention and Response Plan; the IRT develops a strategy for long term response, recovery and mitigation, following the Fort Stewart/Hunter Army Airfield OHS Spill Prevention and Response Plan.
- The **IOSC** initiates post discharge review procedures to include:
 - Investigation of the cause of the spill;
 - Plans for preventing future spills.
- The **IOSC** with primary assistance from the IRT and outside spill response contractors, completes mitigation procedures.

11.0 RESPONSE

See Annex D, Spill Response Organization and Duties; Annex G, Spill Response Contract Support; Annex K, Public Affairs; and Annex U, Habitat Cleanup Methods.
--

11.1 Actions by the Initial Responders After being notified of a spill, the Director of Public Works assesses the situation and, if necessary, assumes the duties of Installation On-Scene Coordinator (**IOSC**). Immediate actions are taken by the Facility Supervisors discovering and reporting the spill, as outlined in Paragraph 10.0 (Discovery, Notification and Response Countermeasures). Following guidelines in **THE RED PLAN**, the DPW alerts and assembles the Installation Response Team (IRT), briefs the IRT on the situation, then initiates the Fort Stewart/Hunter Army Airfield OHS Spill Prevention and Response Plan.

11.2 Spill Classifications Fort Stewart/Hunter Army Airfield facility OHS spill incidents are classified under three categories:

11.2.1 Category 1 Oil spills under 5 gallons and any hazardous substance release within the capability of the responsible unit to safely contain and cleanup. For spills in this category, the fire department may be called in to assess the spill threat and be immediately available, if needed. Other members of the Installation Response Team may be placed on standby until the DPW

further assesses the situation or until the response operation is complete. The DPW may designate a Directorate of Public Works Environmental/Natural Resources Division representative or the Facility Supervisor as in charge of the cleanup and remediation effort. No Installation On-Scene Coordinator is normally required for spills under 5 gallons or for hazardous substance releases under this category, as the Facility Supervisors are trained to safely contain and remediate spills of this magnitude.

11.2.2 Category 2 Oil spills between 5 and 25 gallons or hazardous substance releases beyond the responsible unit's safe cleanup and remediation capability, but within the Installation Response Team's capability. The DPW or the Senior Environmental Engineer serves as the Installation On-Scene Coordinator and marshals Fort Stewart/Hunter Army Airfield assets to cleanup and remediate the spill, such as the Public Works' Road and Grounds crews. Spill contractors may be alerted but not deployed, unless later determined to be needed.

11.2.3 Category 3 OHS spills beyond the capabilities of combined resources at Fort Stewart/Hunter Army Airfield, requiring immediate Regional HAZMAT response team or oil spill cleanup contractor support. Large spills, which significantly threaten the environment or a worst case discharge, fall into this category. The DPW assumes Installation On-Scene Coordinator duties, alerts spill response contractors for immediate response and augmentation, then directs the overall cleanup and remediation effort, utilizing IRT assets and further augmentation from other military installations.

11.3 Installation On-Scene Coordinator Duties (See Annex D) After being notified of the spill and determining its impact, the DPW may assume responsibilities as the Installation On-Scene Coordinator (**IOSC**) or may move to the spill site for a firsthand assessment. In a Category 3 spill, the DPW uses the facility employees and supervisory personnel at the spill site, the Installation Response Team (IRT), and the Fort Stewart/Hunter Army Airfield emergency services (Fire, Police and Medical) to further contain the spill, minimize the risk of fire and to initiate cleanup. As additional information arrives on the effects of the spill, the **IOSC** adjusts the installation response strategy to new priorities and requirements. If additional assets are required, the DPW requests assistance from the primary, and if necessary the secondary, Oil Spill Removal Organization (OSRO) and can request that the Commander, obtain assistance from other nearby military installations.

12.0 PETROLEUM DISCHARGE AND SPILL SCENARIOS

12.1 Response Planning Scenarios

12.1.1 EPA Response Scenario Requirements The EPA Final Rule, effective August 30, 1994 revising 40 CFR Part 112 requires a scenario discussion of response planning levels for the following:

- **Small Discharge** a discharge of 2,100 gallons or less;
- **Medium Discharge** a discharge of 36,000 gallons or 10% of the capacity of the largest aboveground tank at the facility (10% X 420,000 gallons = 42,000 gallons at Fort Stewart/Hunter Army Airfield) or 36,000 gallons, whichever is less, provided that this amount is less than the worst case discharge; and
- **Worst Case Discharge** a discharge of the full capacity of the largest aboveground oil storage tank within a common secondary containment area, or the largest aboveground oil storage tank within a single secondary containment area, whichever is greater. For Fort Stewart/Hunter Army Airfield, the largest tank is 2,100,000 gallons.

12.2 Federal Worst Case Planning Factors Federal worst case planning factors are addressed in EPA's Final Rule, 40 CFR Part 112. These planning factors and required calculations are discussed in detail within Annex I, Federal Worst Case Planning Volumes.

The EPA defines the worst case discharge for Non-Transportation-Related Onshore Facilities as the largest foreseeable discharge in adverse weather. For multiple tank facilities, each with separate secondary containment, the worst case discharge is calculated by determining 100% of the capacity of the largest single aboveground storage tank. The EPA worst case discharge for Fort Stewart/Hunter Army Airfield is calculated to be 2,100,000 gallons.

12.3 Fort Stewart/Hunter Army Airfield Response Planning Scenarios Three possible scenarios for category 2/category 3 oil spills at Fort Stewart/Hunter Army Airfield are presented in this subparagraph. These scenarios do not indicate an order of probability, nor are they inclusive of all possible types of mishaps. They simply serve to comply with regulatory guidance by illustrating possible incidents, and stressing the procedures and methodology for effective planning, and execution of the plans. The amount of oil spilled for the EPA Worst Case scenario is dictated by regulatory guidance, i.e., that the spill must consist of the total contents of the largest aboveground storage tank in separate secondary containment. The scenario's selected are as follows:

<u>Scenario</u>	<u>Type</u>	<u>Quantity</u>	<u>Location</u>
------------------------	--------------------	------------------------	------------------------

***Oil and Hazardous Substance Spill Prevention and Response Plan
US Army, Fort Stewart and Hunter Army Airfield, Georgia***

Case #1	EPA Small Discharge	2,100 gallons	Wright AAF Storage Facility
Case #2	EPA Medium Discharge	36,000 gallons	Evans Bulk Storage Facility
Case #3	EPA Worst Case Discharge	2,100,000 gallons	Hunter AAF Tank Farm

12.3.1 Case #1 EPA Small Discharge Scenario Wright AAF Bulk Storage Facility

The EPA small discharge for Fort Stewart/Hunter AAF involves the release of approximately 2,100 gallons of JP-8 fuel at the tank truck stand adjacent to the Bulk Fuel Storage Facility on Lowe Circle at Wright Army Airfield.

A M-915 5-Ton truck with a 7,500 gallon M-1062 trailer from a unit at Hunter Army Airfield has arrived at the storage facility in order to off-load JP-8 into the bulk storage tanks. After properly grounding the tank truck, connecting the bottom loading hose, and aligning all internal pipeline valves, the driver and fuel operator turn on the appropriate pump and begin offloading fuel. Fueling has been ongoing for approximately ten minutes when suddenly they hear the sound of liquid splashing on concrete coming from under the rear of the truck. They immediately stop the fueling operation and begin to investigate the source of the sound. The driver quickly determines that fuel is pouring from an apparent crack in the bottom of the trailer. (See Figure 2)

Closing the internal trailer valve has no affect on the leak. Running over to the control building, the fuel operator notifies the on-duty NCOIC of the problem who, in turn, calls the control tower by radio to notify Fire Station #2 (located next to the Tower) that a spill has occurred. The NCOIC gathers all the available operators and goes over to the spill site to assess the discharge and keep non-emergency personnel and vehicles away from the storage facility. The fire department arrives near the site and the Senior Fire Officer and NCOIC observe that the trailer has stopped leaking and that much of the spilled fuel has flowed into the grassy area next to the bulk storage facility. The Senior Fire Officer assumes duties as the acting **IOSC** and requests that the Fort Stewart Spill Response Trailer be brought from the main post fire station to Wright AAF and that informs the Senior Environmental Engineer of the spill, who notifies the DPW. The DPW decides that given the circumstances of the spill, that the Senior Fire Officer should continue to serve as the acting **IOSC** and sends the Environmental Engineer and other specialists from the Directorate's Environmental/Natural Resources Division to the spill site to assist. When the spill response trailer arrives, the acting **IOSC** directs that firefighters spread

absorbent material over the fuel still on the concrete in order to clean up as much of it as possible and that boom be used to contain that fuel which drained off the pavement. While this is being done, the environmental specialists inspect downgradient from the storage facility for any sign of fuel and, as a precaution, deploy additional absorbent boom to catch any oil that might be discharged. Public Works' Facilities Engineering Division personnel are alerted to deploy sand, earthmoving equipment and dump trucks to the spill site to assist in the recovery of fuel and removal of contaminated soil. The Senior Fire Officer provides the Senior Environmental Engineer with the initial spill report and, after conferring with the NCOIC and driver, estimates that approximately 2,100 gallons of JP-8 has been spilled. Even though it appears that little environmental damage has occurred, the Environmental/Natural Resources Division notifies Federal, Army, State and local authorities of the spill.

12.3.2 Case #2 EPA Medium Discharge Scenario Evans Field Bulk Storage Facility The EPA medium discharge for Fort Stewart/Hunter Army Airfield involves the release of approximately 36,000 gallons of diesel fuel from Tank #19120 located at the Evans Field Bulk Storage facility.

After a very hot, busy day, Facility personnel secure the front gate and depart. Rain has been falling on and off and drainage ditches along the Evans Field Access Road and Highway 144 contain several inches of water. Soon after sunset, the control valve on Tank #19120's discharge line ruptures and fuel begins to spill into the tank's containment dike. The leak rapidly grows worse and soon fuel is pouring out at the rate of approximately 50 gallons a minute. Because the drain valve on the dike has been inadvertently left open, fuel flows out of the dike and into an oil water separator. The separator's internal storage capacity, 600 gallons, is soon reached and fuel then is discharged into the nearby ditch where it follows natural drainage generally to the southeast. (See Figure 3)

Military Police patrols do not detect the spill and it remains unreported until the following morning, when the facility manager discovers fuel along side the road upon his arrival at the tank farm. The manager enters the facility and quickly locates the source of the spill and shuts the secondary containment drain valve. He immediately calls 911 and reports the spill. Within fifteen minutes, firefighting equipment and the Fire Chief arrive on the scene and the Fire Chief, assuming the role of the acting **IOSC**, assesses the situation. The facility manager tells the Fire Chief that inventory records indicate that approximately 36,000 gallons of fuel was in the tank when the facility closed the day before and that most of what has spilled is now in nearby ditches.

The Fire Chief calls for the department's spill response trailer and notifies the DPW of the spill, providing information IAW the Fort Stewart/Hunter Army Airfield Spill Report. Based on this data, the Environmental/Natural Resources Division notifies Federal, Army, State and local authorities of the spill. The DPW also mobilizes additional Public Works assets, e.g., front loaders and dump trucks, and directs that the installation's primary cleanup contractor be alerted for possible use. By the time that the DPW arrives at the storage facility, firefighters and personnel from the tank farm have moved down the drainage ditches and, using shovels and other hand tools, have emplaced earthen dams to block further movement of the fuel. By this time approximately a half a mile of ditches around the storage facility have been contaminated by the spilled fuel. The DPW assumes the role as the **IOSC** and calls for other needed support from Fort Stewart/Hunter Army Airfield resources.

12.3.3 Case #3 EPA Worst Case Scenario Hunter Army Airfield Tank Farm This EPA worst case discharge for Fort Stewart/Hunter Army Airfield involves the catastrophic collapse of Tank A (#7001) at the Hunter Army Airfield Tank Farm under adverse weather conditions. Following EPA guidelines, this discharge amount equals the maximum "shell" capacity of the largest storage tank, i.e., 2,100,000 gallons.

The spill occurs early on the Sunday Morning of a three-day weekend. Extremely heavy rains have been falling during the preceding 24-hour period and have saturated the grounds in and around the facility, filled all the storage tank secondary containment areas with several feet of water, and flooded the wetlands, streams and canals on the military installation.

Suddenly Tank A experiences a spontaneous, catastrophic fracture on its south side. The wall of the tank splits down its entire height allowing the sudden and complete loss of the tank's total contents. The force of the discharge projects a powerful wave against the containment dike and, because of the hydraulic surge, much of the fuel hurdles over the dike and onto the open ground. Because of the large volume of stormwater run off on the ground, the spilled fuel is rapidly channeled into the streams, drainage ditches and canals leading towards the southwest. (See Figure 4.)

Approximately 30 minutes after the tank collapse, the staff duty officer at the US Coast Guard Air Station calls #911 to report a strong fuel odor. While emergency vehicles are enroute to that location, the Military Police receive a report from a member of the 117th Tactical Control Squadron (Air National Guard), who says that after leaving his headquarters on Perimeter

Road to go home, he was forced to turn around due the strong fumes he encountered about a mile northeast of his unit's location.

Based on this second call, an MP patrol is dispatched to investigate, and they are stopped in the vicinity of the Hunter AAF Tank Farm by the fumes. The Senior Fire Officer, who is at the USCG Air Station looking into that report, is informed by the MP desk sergeant of the situation along Perimeter Road and now suspects that a major spill has occurred at the tank farm and that a large amount of fuel may have entered Lamar Canal.

Proceeding to the tank farm, the fire department and MP patrol visually inspect the facility from along side Perimeter Road and soon determine that a large storage tank has collapsed and fuel has escaped from secondary containment.

The senior fire office assumes the role of acting **IOSC** and apprises the Hunter Army Airfield duty officer of the magnitude of the spill so that the Fort Stewart duty officer can be notified, the DPW informed of the discharge and a recall of needed IRT members from Fort Stewart and Hunter Army Airfield can begin. The Senior Fire Officer establishes an incident command post at the access road leading to the back gate of the tank farm and recommends that the HAAF duty officer begin setting up an Emergency Operations Center (EOC) at Hunter AAF Headquarters. He coordinates with the Military Police to establish a security zone around that portion of the post affected by the spill, to beginning regulating all traffic into this area and to start notification and evacuation of all personnel now in the vicinity of the spill. The DPW is alerted and directs the recall of critical Public Works' personnel and equipment stationed both at Hunter AAF and Fort Stewart, e.g., firefighting, spill response, and earthmoving assets. The DPW further directs that the fire department begin efforts to immediately control and contain the spill as much as possible, e.g., identifying possible dam sites along Lamar Canal ahead of the spilled fuel, such as the tide clapper gate location, where containment and booming might be effectively emplaced. The DPW also directs the duty officer to begin mandatory notification of Federal, State and local authorities identified in **THE RED PLAN** and that the primary Oil Spill Removal Organization be alerted and asked to send a representative to the EOC to help assess the situation and to begin mobilizing their cleanup assets for rapid deployment.

As members of the IRT arrive at the EOC, they are assigned duties concerned with response planning, operations, logistics and administration/finance. The Safety Officer begins development of a site

health and safety plan while the Public Affairs representative prepares public information releases and coordinates with local media that begin arriving at the installation.

Since it must now be assumed that the spill may move beyond the post boundaries, the Senior Fire Officer notifies the City of Savannah and Chatham County authorities of the potential danger to residences, businesses and road and rail traffic along the northeast boundary of Hunter AAF and the possibility of the spill reaching the Little Ogeechee and Forest Rivers. Additionally, Federal, Army and State officials are also notified and assistance requested. The IOSC establishes staging areas in the vicinity of all gates leading on Hunter Army Airfield where all responding personnel and equipment can be logged in before being authorized to proceed to the EOC or spill recovery sites.

13.0 PROTECTION AND CLEANUP PRIORITIES, METHODS AND TECHNIQUES

- 13.1 Recovery Strategy for Spills** The recovery strategy for spills at Fort Stewart/Hunter Army Airfield is driven by both policy and practicality. Army and Georgia policy and regulatory guidance direct that spills will be contained and mechanically recovered, as appropriate. Provisions are included that allow for other methods (dispersants, bioremediation, etc.) to be considered and/or used under certain conditions, provided that prior approval has been granted by the Georgia EPD.

Fort Stewart/Hunter Army Airfield's initial response strategy for a spill of any type oil or hazardous substance is to contain the spill in a defined area and focus initial spill response assets on the protection of priority sensitive areas near the spill site. Given the limited availability of spill response equipment and trained personnel at the installation, this strategy is dependent upon quick actions by Fort Stewart/Hunter Army Airfield personnel to rapidly assess the potential impact of a discharge and, if necessary, begin the deployment of outside responders early. These responders include both public resources, e.g., a State HAZMAT Response Team, and commercial oil spill removal organizations. Once the fuel or hazardous substance is contained, skimmers, vacuum trucks and pumps will be deployed to recover the oil; other appropriate equipment will be used for the recovery of hazardous substances.

The basic group of fuels stored at Fort Stewart/Hunter Army Airfield consists of non-persistent oils (jet fuel, diesel and gasoline). During a spill incident, these materials will have a tendency to spread over the water and volatilize faster than heavier, more viscous oils. These fuels can produce explosions and fire hazards during recovery operations and only trained spill response

personnel should attempt to recover large volumes of these products. The various hazardous and extremely hazardous substances handled and stored at Fort Stewart/Hunter AAF each pose distinct dangers should a release occur. Actions taken in the event of such a release must be carefully considered based on the characteristics of the specific substance and precisely executed in order to protect the responders as well as others who might be affected.

See Annex J, Material Safety Data Sheets and Annex R, Health and Safety Plan

For pooled fuel confined to a hardstand (such as a motor pool area or tank farm truck loading/unloading area) in small quantities of less than 5 gallons, the responsible unit can use on-hand stocks of sorbent boom and absorbent pads to recover spilled fuel. The contaminated material is carefully collected in approved drums, sealed and turned over to Public Works, where the material is stored at a Hazardous Waste Storage Facility. If the spill occurs on the ground with absorption by the soil, the contaminated soil would be dug up and put in a suitable container for turnover to the disposal contractor.

If a large amount of fuel is spilled inside an earthen containment area, a water layer (1 to 2 inches) can be pumped into the basin to prevent the fuel from percolating into the water table. If it appears that an appreciable amount of fuel has seeped into the ground beneath the dike basin, it can be recovered through trenches and/or recovery wells. If a large spill occurs outside the diked areas and it appears that an appreciable amount has seeped into the ground, the DPW Environmental Engineer must define the affected area and ascertain the direction of migration within the soil, then, working with the **IOSC**, develop a plan to contain and recover the fuel. The extent of the spill can usually be determined by digging a network of trenches until the contaminated zone has been bracketed.

Pooled fuel in large amounts, confined to land, will be recovered only by a spill response contractor trained and equipped to safely recover volatile fuel. The contractor has explosion proof vacuum trucks, pumps, and large quantities of connecting hose that can be used in recovery operations and his assigned personnel are specially trained in the use of this equipment. The recovered fuel is normally transferred to tank trucks and hauled directly to a used oil contractor. When significant quantities of pooled fuel are being recovered, the fire department should be present during the recovery operations.

Gasoline that enters the nearby streams and tributaries around Fort Stewart/Hunter Army Airfield, in general, will not be recovered. Gasoline presents dangers and unacceptable risks in water recovery operations.

Booming is normally used with volatile fuels to protect sensitive environmental areas or facilities near the spill site. The boom is put out in front of a spill to deflect the contaminating fuel from the sites, guiding the product away from sensitive areas and keeping the fuel away from the shoreline, or keep it contained in a less sensitive area. The lighter fuels tend to breakup, evaporate, and disperse rather quickly and more frequently the best mitigation strategy initially is to let the fuel evaporate and not try to recover it in the water. JP-8 and diesel fuel are less volatile than gasoline, and, in general, should be recovered. However, a decision to attempt any recovery of fuel off the water or on the method to be used in recovering a spill on land would be dependent on a site-specific hazard evaluation by the Fort Stewart/Hunter Army Airfield DPW, the Safety Officer, and other expert contractor personnel.

Spills of less volatile oils, such as used oil, will be contained and removed as quickly as possible. The danger to recovery personnel is much less, and allows relatively unrestricted recovery of the product from both land and water spills. The faster the persistent oil is recovered, the less chance there is of long term effects from oil residue becoming embedded in environmentally or health sensitive areas.

- 13.2 Protection Priorities** The first priority in any spill is always the protection of human life and health. This priority remains paramount throughout all phases of the response effort. Maximum human protection from a spill at Fort Stewart/Hunter Army Airfield is achieved by timely evacuation (if required), effective containment to areas away from inhabited residences and workplaces, and prompt cleanup.

In accordance with both Army policy and the Area Contingency Plan (ACP), the next priority is to protect natural resources and minimize ecological impacts. At Fort Stewart/Hunter Army Airfield, the primary effort should be to containing the spill and preventing its escape into any waterways, e.g., Canoochee Creek and River, and tributaries leading outside of the installation to the Ogeechee and Forest Rivers, Ossabaw Sound and the intracoastal Waterway (See Tab 5 to Annex E, Environmental Sensitivity Map).

The third priority is to minimize economic and public impact. Actions taken to achieve the first two priorities above, will also achieve this goal. The most effective immediate action to minimize public impact is by extensive booming to keep spilled oil from reaching beyond Fort Stewart/Hunter Army Airfield boundaries.

- 13.3 Cleanup, Protection and Booming** Vegetation, fish, game and wildlife within the immediate area of a spill will be exposed to high toxicity levels of oil.

See Annex U, Habitat Cleanup Methods and Techniques

Cleanup of spills reaching the wetlands areas will be impossible during the adverse weather described in the worst case discharge and most actions will be focused on protection of as many of these areas as possible by booming before they are contaminated. Use of dispersants will be impractical, due to the potential environmental impact and the unlikelihood of securing Army, EPA and State approval. Even booming will be difficult, due to the thick vegetation and the debris in the water.

Outside contracted spill response assets will be immediately focused in multiple areas cordoning off and booming the main drainage and wetlands areas, as well as cleanup on the land at the spill site. These spill response organizations have available disposal trained specialists and state of the art recovery equipment, vacuum trucks, pumps, connecting hoses and absorbent materials.

Follow-on wetlands cleanup actions may have to be initiated once the damage has been assessed. The **IOSC** must coordinate with State and Federal officials on any Fort Stewart/Hunter Army Airfield plan to clean up a wetlands area, before cleanup is initiated. **Some cleanup and remediation efforts can do more harm to the impacted area than the spill itself, and this must be avoided.**

The **IOSC** will normally have to rely on the primary spill response contractor to help develop and implement a proper large-scale wetlands cleanup strategy, but the **IOSC** must give the go-ahead authorization before cleanup work is initiated. The impact on wildlife may further require the establishment of bird and mammal cleaning stations and additional augmentation of environmental specialists. If bioremediation is to be employed, the **IOSC** should seek advanced approval from the Georgia EPD before implementation.

- 13.4 Disposal Procedures** It is the responsibility of the Installation On-Scene Coordinator to ensure that any waste is disposed of properly once cleanup has occurred. The Resource Conservation and Recovery Act (RCRA) and its implementing regulations contained in Title 40, CFR, provides specific guidance to the **IOSC** on the disposal of hazardous waste. Fort Stewart's US EPA and State RCRA identification number is GA42100208 (FS). The Defense Reutilization and Marketing Office (DRMO) at Fort Stewart has contracts with licensed transportation and disposal contractors to routinely remove and dispose of oil and hazardous waste. The off-post transportation and disposal

of all waste will be directed and coordinated by the Public Works Environmental/Natural Resources Division.

13.4.1 EPA Requirements: (40 CFR Part 261): Guidance for the classification and disposal of hazardous substances is provided in 40 CFR Part 261, as set forth by the Resources Conservation and Recovery Act (RCRA). In order to determine the appropriate disposal methodology, a sample of the recovered product may be characterized through laboratory analysis in accordance with 40 CFR Part 261, Subpart C.

13.4.2 State of Georgia Requirements The State of Georgia disposal requirements coincide the EPA's guidance.

13.4.3 Waste Disposal The policies in this response plan address the disposal of all classes of waste and apply to the small, medium and worst case scenarios discussed in paragraph 12.0 of this plan.

Following an oil spill/hazardous substance release, the Responsible Party, the **IOSC**, and the OSRO (if the size of the spill requires its involvement) will dispose of all recovered oil and hazardous substances, and contaminated debris and water in accordance with Federal (40 CFR 261 and 266) and State of Georgia guidelines. In order to assure a well coordinated effort, collection, tagging, product sampling, analysis, staging and disposal should be assigned to a member of the Installation Response Team, either a representative from the Environmental/Natural Resources Division or, in the event of a large spill, the Oil Spill Removal Organization's Operations Manager, under the Environmental/Natural Resources Division's supervision.

Recycling, incineration and land filling are the three acceptable methods of disposal, however, the land filling option should be considered as the least favorable. Recovered products will be subjected to laboratory analysis to identify potentially hazardous waste and then disposed of in accordance with the findings of that analysis. Laboratory tests may be requested by the Environmental Branch and will be conducted for hazardous waste constituents (to include PCBs) and, if applicable, volatile organic analysis will also be conducted. The tests on the oil phase will include a test for flash point, total halogens, and for metals such as arsenic, cadmium, and lead. The tests on the water phase will include a test for total halogens and for metals such as antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, and zinc. Care will be taken to ensure that in the affected areas, no waste that may be incompatible with

the released oil or hazardous substance is treated, stored or disposed of before cleanup operations are completed.

Treatment, Storage, and Disposal facilities (TSDF) regularly used by Fort Stewart/Hunter Army Airfield have been approved by Federal and State regulatory agencies. However, prior to the transfer of substantial quantities of recovered waste material to a TSDF, the Georgia EPD will be contacted to determine if the facility is the subject of any pending investigation or litigation for any illegal activity.

Recovered Product. In some cases recovered petroleum products can be recycled into Army inventory. Oil that is not contaminated by hazardous waste will initially be placed in ASTs or other suitable containers at or near the spill site. Oil that is determined to be contaminated per 40 CFR 261 Subpart C will be transferred to a TSDF. The EPA provides specific guidance in 40 CFR Part 266 relating to TSDF marketers who handle contaminated petroleum products for recycling as energy recovery through incineration. Off-specification used oil in 40 CFR 266 Subpart E, can be incinerated, even if it exhibits a hazardous characteristic under the parameters of 40 CFR Part 261 Subpart C. Depending on the size of the spill and the extent of committed resources, the **IOSC** may direct that the OSRO transfer recovered oil to a commercial vendor, and that the funds received by the OSRO for this transaction be credited toward the Army's financial obligation to the OSRO for supporting the cleanup response.

Oil Contaminated Water. A significant amount of water will be collected with the recovered product. This accumulation of water will quickly decrease the storage space designated for the recovered product. At the discretion of the State of Georgia, and depending on the potential harm that might result from a delayed collection effort, oil contaminated water may be decanted within the containment area at the site of the spill. A facility oil water separator could also be employed as a decanting receptacle, provided the oil/fuel does not contain a constituent that will cause outfall permitting problems. Given Fort Stewart/Hunter Army Airfield's and the OSRO's daily recovery capability, decanting may be a viable option for all but the worst case discharge scenario. Nevertheless, decanting is approved on a case-by-case basis.

Contaminated Equipment and Materials. During cleanup operations it can be expected that there may be substantial quantities of personal protective equipment, drums, valves and components, piping and tank parts, tools, booming, etc., that will become contaminated. Personal clothing will be decontaminated at a personnel shower point established at the spill site

where showers are available for the initial decontamination/bathing of response workers. Water used for decontamination will be cycled through a catch basin and retained for later analysis and separation/recovery of product or disposal through a TSDF. The **IOSC** will also identify a location at Fort Stewart/Hunter Army Airfield where tools, equipment, parts, etc., can be decontaminated. These items will be washed with a solution that is compatible with the items being decontaminated and rinsed with aqueous solutions such as a 5% sodium carbonate and 5% trisodium phosphate. Washing and rinse waters, cleansers, and decontamination solutions will be cycled through a catch basin, a prepared holding or containment pond, or an oil water separator and retained for later analysis and separation/recovery of product, or disposal through a TSDF. The **IOSC** will ensure that all emergency equipment used in and supplies expended during the response operation are cleaned or replenished prior to normal OHS handling operations resuming. The EPA Regional Administrator, as well as State and local agencies, must be notified that facility response equipment is available and ready for use before operations restart.

Contaminated Debris. During cleanup operations, solid oily debris including contaminated absorbents, soils, vegetation, flotsam, will be collected at a designated, centralized collection point (to be determined based on the location and size of the spill), placed in drums or heavy-duty plastic bags, sealed, and depending on the volume of the spill, disposed of; this includes the equipment used at the decontamination site such as plastic ground cover, brushes, sponges, toweling, etc., that cannot be recycled. Substantial quantities of contaminated soil, once tested, may be transported to a TSDF for disposal. The disposal methodology used by the Installation Response Team for solid petroleum waste is determined on a case-by-case basis. However, final disposal can be accomplished by incineration, landfill, or recycling, or a combination of the three. Most often, disposal is accomplished by incineration which is conducted by a TSDF. For the worst case discharge, incineration might prove to be too costly or simply unmanageable, and an alternative or multiple means of disposal may be required. As previously mentioned, land filling contaminated wastes is not preferable but can be selected if all other avenues have been exhausted. Another solution, if practical, would be to decontaminate the solid waste using a facility oil water separator as the receptacle for the effluent run-off, provided the oil/fuel does not contain a constituent that will cause outfall permitting problems.

Hazardous Substance Disposal. Disposal of a recovered product which is clearly regulated as a hazardous substance will be accomplished on a case-by-case basis. If it is not feasible to reintroduce the recovered product into

inventory, disposal should be accomplished through a TSDF. A TSDF is regulated under 40 CFR Parts 260 through 266. Care should be taken to ensure that the selected vendor holds a current EPA permit pursuant to these regulations. This can be verified by securing a copy of the permit which will include the appropriate EPA identification number.

Hazardous substance disposal arrangements should also include the intended method of disposal and/or final destination of the recovered product. It should be made absolutely clear to prospective vendors that Army hazardous substance disposal will be handled in a manner that is not only in compliance with acceptable EPA standards but includes the required documentation to demonstrate compliance. To that end, the selected vendor will be required to provide Fort Stewart/Hunter Army Airfield with disposal documentation in the form of a letter or Certificate of Destruction. This documentation and the laboratory analysis detailing the hazardous characteristics of the product will be kept on file with other important documentation related to the response actions taken.

14.0 SAFETY PRECAUTIONS FOR HAZARDOUS SUBSTANCE SPILLS The Fort Stewart/Hunter Army Airfield Hazard Communication Program provides for the safe handling and use of hazardous substances; identification of operations and activities where hazardous substances are used or stored; correct labeling and safe storage and disposition of hazardous substances; availability of appropriate Material Safety Data Sheets; and training of personnel on the safe handling and use of hazardous substances. Specific safety precautions to be followed in the event of a spill depend on the characteristics of the hazardous substance(s) involved and must be determined on a case-by-case basis. However, all operational and response personnel aware of any suspected or actual release must always emphasize on-scene safety and will follow these general procedures:

- **Secure the scene** without entering the immediate hazard area;
- **Evacuate unprotected personnel** a safe distance from the hazard area;
- **Obtain help:** notify responsible persons, e.g., the DPW, and request assistance from qualified personnel;
- **Determine required personnel protection equipment** before any personnel enter the affected area; and
- **Continue to act cautiously** and avoid inhalation, ingestion, injection and absorption even if no hazardous substance is known to be involved.

See Annex J, Material Safety Data Sheets and Annex N, Site-Specific Emergency Response Plans

15.0 OIL INVENTORY CONTROL PROCEDURES

- 15.1 Bulk Storage Facilities** Inventory control procedures are designed to ensure full accountability of government-owned fuel, to safeguard against pilferage, and to permit the early detection of a discharge. Procedures followed by Fort Stewart/Hunter Army Airfield are in accordance with industry standards, US Army regulations and manuals, and unit SOPs. Generally, every active bulk storage tank, i.e., a tank used to issue fuel, is gauged at the beginning and end of each day utilizing a gauging stick or a steel tape. Further, tanks used in the receipt of fuel are gauged before and after receipt. The results of these gauge readings are standardized (see next paragraph) and noted in the unit/activity log book that is maintained at the facility. Additionally tanks are gauged at least once a week regardless of whether or not fuel is received/issued. During all gauging, testing for water in the fuel occurs and the results are recorded. Additionally, the facility manager/NCOIC conducts or supervises a walk-through inspection of each facility every workday. The inspector walks the transfer lines, inspects spill containment devices, and examines the tanks, pumps and equipment in the facility to insure that there are no system leaks. The results of this inspection are also recorded in the facility's log book.

All gauged volumes are standardized to 60° F and inventory reconciled each day. The inventory is certified in the log at the end of each day by the manager/NCOIC. Weekly reports are submitted to the next higher headquarters and, in the case of the Evans Field and Wright AAF Bulk Storage Facilities and the Hunter AAF Tank Farm, monthly inventories are submitted to the DOL Resource Management Division for reconciliation and accountability. Inventory tolerances for diesel fuel is 0.5% and for JP-8 and gasoline, 1.0%.

- 15.2 AAFES Service Station** The Main Post and newly constructed HAAF AAFES Service Station tanks are equipped with the TIDEL electronic tank monitoring system. This system allows the station manager to print out a report of the amount of fuel, by tank, on hand. This is normally done at the conclusion of every day and their results are recorded. Based on this report, the manager then orders additional deliveries for the following day. Delivery is made by the same transporter, who is under a one year contract with AAFES. Upon arrival, the tank truck driver presents the invoice for the day's delivery and receives a key to unlock the loading pit. The driver manually gauges the tank before and after the delivery, records this information on the invoice, and presents the invoice and the loading pit key to the station manager after the delivery is complete. The station manager reconciles receipt, issue and on hand amounts every day. A monthly report is submitted to AAFES headquarters and a discrepancy of more than 500 gallons for any grade fuel requires an

investigation. Discrepancies can result from errors in delivery amounts, faulty tank and pump readings, as well as leaks (loss of fuel or infiltration of water).

16.0 SECURITY Security at Fort Stewart/Hunter Army Airfield is an important part of preventing spills and acts of vandalism that can lead to spills.

16.1 Entry Control of Personnel and Vehicles Fort Stewart/Hunter Army Airfield is an open access facility restricted by fences, gates, and Military Police patrols. All opened gates have warning signs advising those entering of restrictions and limitations placed on access to the installation. Military police patrol the perimeter and interior of the installation continuously. The normal Post operating hours are from 7:30 AM to 4:30 PM, Monday through Friday. Essential organizations and facilities are manned on a 24-hour basis.

16.2 Physical Security The bulk storage facilities generally have personnel on duty during standard operating hours from 7:00 a.m. to 5:00 p.m. Monday through Friday and during special night or weekend training sessions. Additionally, on-call personnel are available on a 24-hour basis. With the exception of the Central Energy Plant, the bulk storage facilities are each encompassed by a barbed wire chain link fence. Gates to these facilities are either closed and locked, or are monitored by individuals in administration/ control offices at the entrances to each of the facilities. These gates are locked during off-duty hours. The Central Energy Plant is occupied continuously and vehicular access to the storage area is easily monitored.

At the Evans Field, Wright AAF and Hunter AAF bulk storage sites, supervisor and fuel handling personnel perform before and after operations inspections daily. The inspector evaluates the security and status of all fuel storage and handling components. If irregularities occur, the inspector makes adjustments and notifies the appropriate supervisor.

During duty hours, valves on all the bulk aboveground storage tanks are closed and locked except when such tanks are actively involved in fuel transfer operations. All valves are closed and locked during non-duty hours.

The Main Post AAFES Service Station is open on a 24-hour basis and the Bryan Village and Hunter Army Airfield Stations are generally opened daily from 7:00 AM to 10:00 PM. Employees are present throughout the area during these times and the area is checked by Military Police. Access to the UST loading pits and power switches for the fueling pumps is by lock-and-key and strictly controlled by the station managers.

- 16.3 Lighting** All bulk storage sites are sufficiently illuminated at night to deter acts of vandalism, and to help detect oil and hazardous substance discharges. Signs are posted on fences and along access roads leading into bulk storage sites indicating that authorized personnel only are allowed into these facilities.
- 16.4 Security Police** Military police patrol the exterior boundaries of the bulk aboveground storage sites, and the AAFES Service Stations on a routine basis. If they are suspicious of a problem inside the locked facility, they are expected to investigate the situation. If a problem is found, the Military Police report to the Desk Sergeant. The Desk Sergeant contacts the Post Staff Duty Officer, who contacts the DPW, operating unit personnel, or the managers of the AAFES Service Stations.
- 16.5 Communications** The operations staff at the storage facilities all have access to commercial phones. Additionally, personnel at the Army airfields have hand-held radios. Military police have both vehicle and hand-held radios that allow instant emergency communications to fire and medical services.

There are several Fort Stewart/Hunter Army Airfield operations centers that are manned on a 24-hour basis, and possess the trained personnel and communications equipment necessary to receive and forward emergency calls concerning fuel and hazardous substance storage areas. These operations centers also have the ability to begin the notification and response procedures outlined in the OHS Spill Prevention and Response Plan. Included in this category are: the fire department, Military Police, and the Fort Stewart/Hunter Army Airfield Emergency Operations Center. See Annex D, Spill Response Organization and Duties, for a detailed discussion and additional information.

17.0 POST DISCHARGE REVIEW PROCEDURES/PLAN REVIEW AND UPDATE

- 17.1 Requirement for a Post Discharge Review** A formal Post Discharge Review may be conducted by the Chief, ENRD on all oil spills that are equal to or greater than 25 gallons, impact State waters or threaten areas off the military reservation, and hazardous substance spills that involve discharges that exceed mandated Reportable Quantities (RQs).
- 17.2 Reports for Small Spills** For a spill of less than 25 gallons of oil, that does not impact State waters or is below the hazardous substance RQ, a short written report, prepared by the Officer in Charge or facility operator, concerning the circumstances and mitigation efforts will be forwarded to the DPW for informal review and appropriate action by the Environmental/Natural Resources Division.

17.3 Reports for Reportable Spills Within 7 days after a reportable spill (an oil spill equal to or greater than 25 gallons, or a spill that impacts State waters, or threatens areas off the military reservation or a hazardous substance release that is equal to or great than the RQ) occurs on the Fort Stewart/Hunter Army Airfield Military Reservation, a more comprehensive written report concerning the circumstances, effects, notifications made, response and mitigation efforts will be prepared by the spilling agency and forwarded to the DPW. Utilizing this report, the Environmental/Natural Resources Division at Directorate of Public Works will conduct a Post Discharge Review. This Review will include further investigation, if necessary; the determination of the exact cause of the discharge; an examination of the facility's operations to determine if changes are necessary to prevent similar discharges in the future; an examination of the actions taken during the incident response; and the availability and suitability of response materials, equipment and personnel. As part of the Review, recommendations will be made concerning the modification of operating procedures at the facility and any changes to existing response plans.

17.4 Post Discharge Review Scope As appropriate, the Post Discharge Review should address the following planning areas:

Detection	Response Effectiveness	Response Strategy
Notification	IRT Organization	Response Resources Used
Measurement	Assessment/Evaluation	Public Relations
Mobilization	Mitigation Results	State Follow-up Tasks

17.5 Report Submission When the Post Discharge Review is completed by the ENRD, a written report, with appropriate attachments, signed by the DPW, is submitted to the Commanding General for final high-level management review and for forwarding to higher headquarters, if appropriate.